

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)
)
Federal-State Joint Board on Universal)
Service: Promoting Deployment)
and Subscribership in Unserved and)
Underserved Areas, Including)
Tribal and Insular Areas)
)

CC Docket No. 96-45

**MOTION OF TITAN WIRELESS
TO ACCEPT LATE FILED COMMENTS**

Titan Wireless ("Titan") respectfully files this motion to accept late-filed comments in the above-captioned rulemaking proceeding. Comments on the Commission's Further Notice of Proposed Rulemaking, FCC 99-204, released September 3, 1999 in this proceeding were due on December 17, 1999. Partly due to an inadvertent oversight associated with the fact that this was an extended due date and partly in light of the complexity of the questions raised by this important proceeding, Titan is filing its comments in the proceeding with a delay of only one day. This one-day delay will not cause prejudice to any party. Conversely, consideration of Titan's views on extending service to unserved areas and Tribal lands will serve the public interest. Accordingly, there is good cause to accept Titan's comments for filing.

Respectfully submitted,



James T. Taylor
General Counsel
Titan Wireless
3033 Science Park Road
San Diego, CA 92121
(619) 552-9765

Pantelis Michalopoulos
Steptoe & Johnson, LLP
1330 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 429-3000

Dated: December 20, 1999

Attorney for Titan Wireless

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CC Docket No. 96-45

COMMENTS OF TITAN WIRELESS

Titan Wireless ("Titan") hereby submits its comments in the above-captioned rulemaking proceeding, where the Commission is pursuing one of its most significant mandates – to ensure truly universal service to the perennial telecommunications have-nots, including Tribal lands.¹ As Titan has pointed out in its comments on the companion notice of proposed rulemaking, where the Commission is specifically exploring ways to extend wireless services to Tribal lands, Titan's background singularly equips it to respond to the challenges of connecting those underprivileged areas. Titan has developed a Very Small Aperture Terminal system that is tailored to serving remote areas either on a stand-alone basis or in conjunction with a fixed-link wireless system, and has deployed the system in just such areas in many developing countries. Titan's technology enables it to serve remote communities at a substantially lower cost per household than would be required by the deployment of a wireline system.

At the same time, the inexorable economics of service to these perennially unserved or underserved areas mean plainly that support is needed, in the form of focused and federally coordinated universal service funding as contemplated by the Commission in this rulemaking. Titan applauds the

¹ Further Notice of Proposed Rulemaking ("FNPRM"), FCC 99-204 (rel. Sept. 3, 1999).

Commission's initiatives in both this and the companion wireless service rulemaking proceeding. Titan offers certain discrete comments to ensure that the regulatory incentives being considered by the Commission are promulgated, and that they become meaningful levers for extending wireless services to these areas.

These are the highlights of Titan's comments:

- Pursuant to its jurisdiction under 47 U.S.C. § 214(e)(6), the Commission has the authority to designate eligible telecommunications carriers for the purpose of receiving support to serve Tribal lands, which are not subject to any state commission's jurisdiction. Furthermore, the Commission has the authority to designate any satellite provider whose rates are not subject to state regulation as an eligible telecommunications carrier for the purpose of serving any underserved areas.
- It is essential for the Commission energetically to exercise that authority to its fullest extent, as the problems of ensuring service to Tribal lands and other unserved areas would benefit from a nationally coordinated approach such as a national auction mechanism.
- While Titan supports the concept of treating Tribal lands as stand-alone study areas, the Commission should, through coordinated action in all appropriate proceedings, also consider Tribal lands as a unit for the purpose of determining the costs and level of support.
- The Commission should follow the competitive bidding method for determining the level of universal service support and allocating it to eligible carriers for all areas in which it has the authority to designate such carriers, and certainly for Tribal lands.
- The Commission should opt for regulatory incentive as opposed to fiat to encourage universal service. Competitive bidding is the best method for marshalling private profit motives in aid of public policy. Indeed, under competitive bidding, auctions would result in the winning bidder being ordered to provide service. In effect, therefore, auctions may be seen as the mechanism for selecting whom to order to provide service under the Section 214(e)(3) authority.
- Outside the auction mechanism, the Commission should refrain from ordering any carrier other than the incumbent Local Exchange Carrier to provide service under Section 214(e)(3). Such an approach would only chill the interest of satellite carriers in attempting to serve remote

communities, since becoming vulnerable to a Commission command under Section 214(e)(3) might be the price for that interest.

- While the benefits of competition are undeniable, the questions of universal service also require a realistic approach. The principal concern of the Commission in this rulemaking is to ensure service where there is none, as opposed to tackling, for example, the problems arising from the existence of only one provider. An exclusivity term for the auction winner is an important tool to that end. Moreover, Titan believes that the Commission has the legal authority to designate only one carrier to receive support in an unserved area.
- The Commission should consider adopting a "second price" or "Vickrey" auction, both because it is recognized as encouraging bidders to reveal their true costs, and because, in this particular case, the "winner's curse" of overshooting would inflict harm on more than the winner and would be inefficient in extremely palpable ways. The winner's underestimating of its costs would specifically result in service not becoming a reality and the Tribal land service problems remaining unsolved.
- The Commission should display relative flexibility and consider certain limited exceptions to the required list of services, to take account of the non-wireline technologies that can offer substantial contributions to universal service and accommodate certain limitations of these technologies. Under such a policy of flexibility, for example, the Commission might consider allowing satellite carriers to provide discount minutes as part of a calling plan that effectively ensures access to emergency services and provides operator or directory assistance through the services of another operator.
- The Commission should recognize that prepaid plans are an indispensable part of any serious attempt to serve these low-income areas: realistically, collection difficulties are one of the most significant deterrents to investment in serving these areas. Such plans would also help attain the Commission's goal of better bill management for low-income subscribers.

I. BACKGROUND

A primary focus of Titan's activity has been the development of wireless solutions for unserved or underserved areas throughout countries in the Asia-Pacific region, Latin America and Africa – areas where the problems of spotty service are of course considerably more acute than in the U.S. In a number of joint ventures with regional operators that have honed its expertise on the problems of universal

service, Titan has learned that the answer to these problems is almost always twofold:

- private innovation – implementing cheaper wireless technologies to tackle the economics of extraordinarily high “per pop” costs and low expected returns – matched by
- enlightened public policy – appropriate universal service supports and carefully structured regulatory incentives.

In a recent joint venture that Titan entered into in Guatemala, for example, one component for the success of the deal was the efficient wireless technology provided by Titan. Equally crucial to the economics of the deal, however, was the stream of universal service subsidies provided for this service by the Guatemalan regulators.

As the Commission is aware from Titan's prior submission in this proceeding, Titan Wireless has designed and provides a Very Small Aperture Terminal (“VSAT”) rural telephony system that is well-suited for service to Tribal lands. Titan's EXPRESSCONNECTION™ system of terminals has been developed specifically to provide maximum economy for thin-route rural telephony applications. The system provides satellite-based voice telephony, facsimile services and Internet connectivity, and has been rolled out in low density areas in Indonesia, Guatemala and other countries. In addition, Titan provides integration functions for terrestrial wireless systems that can also be used for economical service to Tribal lands.

Titan has a strong interest in tapping its international expertise and developing solutions for bringing broadband services to these areas, either in joint ventures with service providers or in the capacity of a service provider itself. In particular, Titan plans to bring to bear domestically its international experience in structuring “build-own-operate,” “build-operate-transfer” and similar types of arrangements with service providers, including cooperatives and local investment groups. Under such arrangements,

Titan provides an optimized local wireless system and in-depth operator support in exchange for revenue sharing. Depending on the particular case, the solutions offered by Titan will consist of a combination of satellite and terrestrial technologies, and will extend to broadband capabilities, including Internet and Worldwide Web access and VSAT Asymmetric Digital Subscriber Lines.

II. THE COMMISSION SHOULD TREAT TRIBAL LANDS AS SEPARATE STUDY AREAS

The Commission seeks comment on instituting an exception to the study area rules whereby Tribal lands would essentially constitute a separate study area (for example, on a state-wide basis) for the purpose of designating a rural carrier and therefore qualifying that carrier for high cost support. Titan supports this notion, but also believes that Tribal lands should be viewed as separate areas for the purpose of determining costs and the level of support needed to secure service. Considering Tribal lands as part of a broader area results in dilution of the average estimated cost of service, and would result in inadequate support by failing to recognize the high cost of serving these areas to its full extent.

III. THE COMMISSION SHOULD AWARD UNIVERSAL SERVICE SUPPORT TO ELIGIBLE CARRIERS, INCLUDING SATELLITE AND WIRELESS CARRIERS, THROUGH COMPETITIVE BIDDING

The FNPRM seeks comment “on whether the Commission, rather than state commissions, has the jurisdiction to designate terrestrial wireless or satellite carriers as eligible telecommunications carriers for receiving universal service support.” FNPRM at ¶ 77. Titan believes that Section 214(e)(6) gives the Commission that authority.

The language of that section, added in 1997 to the universal service reform provisions of the 1996 Telecommunications Act, is broad: under it, the Commission may designate as an eligible carrier “a common carrier providing telephone exchange service that is not subject to the jurisdiction of a State

Commission." It would be inappropriate, and without any basis on the face of the statutory language, to read it as restricting the Commission's authority only to tribal carriers or only to service provided in Tribal lands. Rather, Titan agrees with the Commission's tentative conclusion that the question of whether a carrier is subject to a state commission's jurisdiction depends either on the nature of the service provided or on the geographic area in which it is provided. See FNPRM at ¶ 78. Satellite carriers, and providers of many types of wireless service, are not subject to rate review or other rate regulation by a state commission, and therefore may be designated by the Commission whether or not the service in question would be provided in a Tribal area. Likewise, service in a Tribal land is itself enough to trigger Commission authority under Section 214(e)(b).

In that respect, while consultation with the relevant Tribal authority is certainly a sensible step to be taken by any carrier, neither it nor any form of consultation with the state commission should be parlayed by the Commission into jurisdictional prerequisites to the Commission's exercise of its authority under Section 214(e)(6), see FNPRM at ¶ 82, as there is no basis in the statutory language for such prerequisites. Rather, carriers should be free to file designation applications with the Commission without any requirement of prior consultation. The FNPRM recognizes correctly that all interested parties would be free to raise their challenges in the resulting proceeding.

The Commission also invites comments on its authority to order a carrier to provide service to an unserved community. The Commission, however, has laudably seized on the incentive-based regulatory notion of securing service to these communities through competitive bidding. Titan believes that this proposal can ultimately short-circuit the debate over Section 214(e)(6). Of course, regulation by incentive is superior to regulation by fiat. Indeed, auctions can be viewed as a mechanism for exercising in a rational manner the command authority given the Commission by Section 214(e)(3). It is only through competitive bidding that the Commission can accurately determine which carrier is "best able to provide

such service to the requesting unserved community," 47 U.S.C. § 214(e)(3). Thus, competitive bidding can be used as a method for selecting the carrier to be required by the Commission to provide service under Section 214(e)(3), with universal service fund support whose level will again be determined by the auction.

Certainly, should the Commission decide to exercise its command authority outside the auction mechanism, the Commission's inquiry should be limited to incumbent Local Exchange Carriers, and should not extend to providers of satellite services.² Setting aside jurisdictional issues and questions of statutory interpretation, satellite carriers can voluntarily help solve the problems of universal service with the appropriate regulatory incentives, and their interest in serving remote communities would only be chilled if it were to make them vulnerable to Commission commands to provide unprofitable service.

The Commission should therefore consider designating carriers and allocating universal service support through competitive bidding, certainly for Tribal lands but also for other unserved areas.³ With respect to such auctions, the FNPRM raises a number of questions, including that of the appropriate number of winners. Titan agrees fully with the Commission's proposal "that qualified eligible telecommunications carriers bid to secure an exclusive right to receive universal service support for serving the unserved tribal area." FNPRM at ¶ 106. Titan's international experience is consistent with the Commission's tentative view on this subject:

² See FNPRM at ¶ 72 ("We seek comment on how a satellite services provider should be treated for this issue"). *Id.* at ¶ 26 ("We also seek comment on whether our inquiry must be limited to incumbent LECs and competitive eligible telecommunications carriers or whether we may also include other competitive LECs, interexchange carriers, terrestrial wireless or satellite providers").

³ Since the Commission has authority to designate eligible telecommunications carriers not subject to a state commission's jurisdiction under Section 214(e)(6), it arguably also has authority to conduct auctions for service to unserved areas outside Tribal lands where one or more (but not necessarily all) bidders are expected to be such carriers. In any event, for service to unserved areas other than Tribal lands, auctions are still the best methodology for allocating USF support, after coordination with, and/or approval by, a state commission if required.

We seek comment on whether the characteristics of the unserved tribal lands may be such that it is not economically practical to support more than one provider to serve unserved, tribal lands. To the extent that supporting a single provider is more economical, permitting multiple providers to receive federal universal service support may not be in the public interest. In addition, if all carriers were entitled to receive support at the level determined in the competitive bidding auctions, bidders would have no incentive to bid below the opening level; that is, competitive bidding would not reveal the minimum amount of support necessary to provide service to the area.

Id.

While generally Titan recognizes the important benefits of competition, these benefits are plainly not the primary consideration when the problem to tackle is no service at all (as opposed to service by only one provider). Indeed, in Titan's view, a 10-year exclusivity term is an appropriate component of any package to induce costly service to remote areas.

Some parties have expressed concern with the Commission's legal authority to designate eligible carriers with exclusive service rights. There should be no doubt, however, that the Commission has that authority under Section 214(e)(6). Not only does that section not include any requirement that the Commission designate more than one carrier, in contrast with Section 214(e)(2). In addition, this conclusion follows a *fortiori* from the logic of Section 214(e)(2). If state commissions *may* designate only one carrier for rural areas, see 47 U.S.C. § 214(e)(2) the Commission too may, under Section 214(e)(6), designate only one carrier outside a state commission's jurisdiction for rural areas and, all the more so, for Tribal lands.⁴

⁴ On the question of "reservation price" raised by the Commission, Titan does not necessarily oppose a reservation price requirement. Titan notes, however, that the forward-looking cost system may not capture all costs associated with instituting service to these areas and should be adjusted to accommodate the cost structure of technologies other than the terrestrial wireline service that informed its design.

Another question on which the Commission invites comment is the possibility of "second price" or "Vickrey" auctions. Titan supports this auction methodology. As the Commission notes, holding the lowest bidder to the *second* lowest estimate of needed support encourages bidders to reveal their actual costs where they would be more reluctant to do so in a "first-price" type of auction. In addition, the risk of overshooting on the winner's part (here, underestimating its needed support and being held to that low estimate) is especially tangible in this case. In other auctions, the ultimate provision of service is only one consideration in structuring the auction, and it may be more acceptable to leave presumably rational bidders to their devices and permit them to shoulder the risk of such overshooting. In connection with universal service, however, the paramount consideration informing the auction structure is to ensure service where there is none. The winner's curse interferes with that goal, since holding the winning bidder to a below-cost bid would almost certainly mean that service would not be provided owing to inadequate support. Vickrey auctions would alleviate this concern.

IV. THE COMMISSION SHOULD ADOPT A POLICY OF FLEXIBILITY REGARDING THE COMPONENTS OF, AND MANNER OF PROVIDING, UNIVERSAL SERVICE

It is, of course, essential that the Commission carefully prescribe the minimum "*sine qua non*" components of service for unserved communities. At the same time, the Commission should also introduce a degree of flexibility and recognize certain exceptions, to accommodate certain limitations of non-wireline technologies. While satellite technology is more efficient than wireline systems in serving remote communities, satellite carriers serving these communities may be inherently less well equipped than wireline providers to satisfy fully certain of the required elements of universal service, such as operator and directory assistance and emergency services. On the other hand, satellite carriers could in many cases offer the effective equivalent of these elements, for example in the form of calling plans including discount

minutes for access to operator and directory assistance provided by other operators. The Commission should adopt a policy of flexibility in that regard.

The Commission should also recognize that prepaid service is another essential prerequisite to many carrier's willingness to undertake the investment required to serve these low-income communities. In the absence of a prepaid service structure, the collection difficulties inherent in such communities are a very significant deterrent to an investment decision. As Titan knows from its international experience, such difficulties become an even greater impediment if complicated by the fact that collection must take place in another sovereign nation, as would be the case with service on Tribal lands.⁵

V. CONCLUSION

Titan applauds the Commission's initiatives in this area, and believes that universal support, and the manner of allocating it to efficient providers being considered by the Commission, will contribute substantially to resolving the problems of inadequate service to Tribal lands and other unserved areas.

James T. Taylor
General Counsel
Titan Wireless
3033 Science Park Road
San Diego, CA 92121
(619) 552-9765

Dated: December 20, 1999

Respectfully submitted,



Pantelis Michalopoulos
Steptoe & Johnson, LLP
1330 Connecticut Avenue, N.W.
Washington, D.C. 20036
(202) 429-3000

Attorney for Titan Wireless

⁵ Proposed plans would also substantially help with the Commission's goal of better bill management among low-income subscribers.

CERTIFICATE OF SERVICE

I, Pantelis Michalopoulos, hereby declare that a copy of the foregoing Comments of Titan

Wireless was sent this 20th day of December, 1999 by messenger to the following:

Chairman William E. Kennard
Federal Communications Commission
The Portals
445 Twelfth Street, S.W. – Room 8-B201
Washington, D.C. 20554

Commissioner Susan Ness
Federal Communications Commission
The Portals
445 Twelfth Street, S.W. – Room 8B-1115
Washington, D.C. 20554

Commissioner Harold W. Furchtgott-Roth
Federal Communications Commission
The Portals
445 Twelfth Street, S.W. – Room 8A-302
Washington, D.C. 20554

Commissioner Michael K. Powell
Federal Communications Commission
The Portals
445 Twelfth Street, S.W. – Room 8A-204
Washington, D.C. 20554

Commissioner Gloria Tristani
Federal Communications Commission
The Portals
445 Twelfth Street, S.W. – Room 8A-204
Washington, D.C. 20554



Pantelis Michalopoulos